

## EAST Search History

| Ref # | Hits    | Search Query  | DBs                | Default Operator | Plurals | Time Stamp       |
|-------|---------|---|--------------------|------------------|---------|------------------|
| L1    | 5       | "5657522"   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/02/15 17:36 |
| S25   | 104548  | electrod\$3 same coat\$3  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/02/05 12:59 |
| S26   | 3117    | S25 same separator\$3   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/11 10:11 |
| S27   | 2743    | S26 and (fold\$3 or bent or bend\$3 or overlap\$3 or overlay\$3 or press\$3)                | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:11 |
| S28   | 1106    | S26 and (fold\$3 or bent or bend\$3 or overlap\$3 or overlay\$3)                            | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/11 10:50 |
| S29   | 104614  | electrod\$3 same coat\$3  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 08:50 |
| S30   | 1357702 | expos\$3 or uncoat\$3   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 08:50 |
| S31   | 61979   | S29 and S30   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 08:51 |
| S32   | 114820  | S30 same electrod\$3  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 08:52 |
| S33   | 38931   | S29 and S32   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 08:53 |
| S34   | 2234625 | separator or fil or membrane or layer or sheet  | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 08:54 |
| S35   | 36249   | S34 and S33   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 11:29 |
| S36   | 1       | "5508122".pn.   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:02 |
| S37   | 4834162 | coat\$3 or deposit\$4 or deliver\$3 or enwrap or encapsulate or envelop or cover or form\$3 | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:03 |
| S38   | 1039230 | exposed or uncoated   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:04 |
| S39   | 1357702 | expos\$3 or uncoat\$3   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:06 |
| S40   | 258938  | electrod\$3 and S39   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:07 |
| S41   | 4834162 | coat\$3 or deposit\$4 or deliver\$3 or enwrap or encapsulate or envelop or cover or form\$3 | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:07 |
| S42   | 258034  | S41 and S40   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:09 |
| S43   | 12575   | S42 and separator   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 12:09 |
| S44   | 3126580 | (fold\$3 or bent or bend\$3 or overlap\$3 or overlay\$3 or press\$3)                        | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 13:26 |
| S45   | 11225   | S44 and S43   | US-PGPUB;<br>USPAT | ADJ              | ON      | 2007/01/16 13:23 |

## EAST Search History

|     |         |  |                   |     |    |                  |
|-----|---------|--|-------------------|-----|----|------------------|
| S46 | 570023  | electrod\$3  | US-PGPUB; USPAT   | ADJ | ON | 2007/01/16 13:25 |
| S47 | 3126580 | (fold\$3 or bent or bend\$3 or overlap\$3 or overlay\$3 or press\$3)   | US-PGPUB; USPAT   | ADJ | ON | 2007/01/16 13:27 |
| S48 | 62934   | S46 near5 S47  | US-PGPUB; USPAT   | ADJ | ON | 2007/01/16 13:32 |
| S49 | 56200   | S46 near4 S47  | US-PGPUB; USPAT   | ADJ | ON | 2007/01/16 14:08 |
| S50 | 99568   | S46 with S47   | US-PGPUB; USPAT   | ADJ | ON | 2007/01/16 13:42 |
| S51 | 5641    | S49 and "429".clas.  | US-PGPUB; USPAT   | ADJ | ON | 2007/01/16 14:22 |
| S52 | 4071    | S51 and batter\$3  | US-PGPUB; USPAT   | ADJ | ON | 2007/01/16 14:23 |
| S53 | 74      | 429/94.ccls. and ((fold\$3 or bend\$3 or bent) with (current collector))   | US-PGPUB; USPAT   | ADJ | ON | 2007/01/17 10:37 |
| S54 | 10282   | H01M\$8 and (coil\$4 or spiral\$3 or wound or wind\$3 or jelly\$ or helical or helix or roll\$4 (cylindrical\$2 adj3 (element or assembly or group)))    | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:30 |
| S55 | 10282   | H01M\$8 and (coil\$4 or spiral\$3 or wound or wind\$3 or jelly\$ or helical or helix or roll\$4 (cylindrical\$2 adj3 (element or assembly or group)))    | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:36 |
| S56 | 1       | S55 and (battery (electrochemical adj2 cell))  | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:37 |
| S57 | 8276    | S55 and (battery or (electrochemical adj2 cell))   | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:37 |
| S58 | 0       | S57 and ((fold\$3 or bend\$3 or bent) with (electrode or anode or cathode))  | US-PGPUB; USPAT   | ADJ | ON | 2007/01/17 10:39 |
| S59 | 21172   | ((fold\$3 or bend\$3 or bent) with (electrode or anode or cathode))  | US-PGPUB; USPAT   | ADJ | ON | 2007/01/17 10:40 |
| S60 | 354972  | battery or (electrochemical adj2 cell)   | US-PGPUB; USPAT   | ADJ | ON | 2007/01/17 10:40 |
| S61 | 375572  | battery or (electrochemical adj2 cell)   | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:41 |
| S62 | 15379   | H01M\$8 and (coil\$4 or spiral\$2 or wound or wind\$3 or jelly\$ or helical or helix or roll\$4 or (cylindrical\$2 adj3 (element or assembly or group))) | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:44 |
| S63 | 380     | S62 and (batter or (electrochemical adj2 cell))  | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:44 |
| S64 | 11995   | S62 and (battery or (electrochemical adj2 cell))   | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 10:44 |
| S65 | 372     | S64 and ((fold\$3 or bend\$3 or bent) with (electrode or anode or cathode))  | EPO; JPO; DERWENT | ADJ | ON | 2007/01/17 11:19 |

## EAST Search History

|     |        |  |                              |      |    |                  |
|-----|--------|--|------------------------------|------|----|------------------|
| S66 | 704781 | electrode or anode or cathode  | US-PGPUB;<br>USPAT           | ADJ  | ON | 2007/01/18 13:38 |
| S67 | 35388  | S66 and separator  | US-PGPUB;<br>USPAT           | ADJ  | ON | 2007/01/18 13:39 |
| S68 | 2623   | S66 near (bent or bend\$3 or fold\$3)  | US-PGPUB;<br>USPAT           | ADJ  | ON | 2007/01/18 13:43 |
| S69 | 497    | S68 and "429".clas.  | US-PGPUB;<br>USPAT           | ADJ  | ON | 2007/01/18 13:45 |
| S70 | 0      | ("2007/0009789").URPN.   | USPAT                        | ADJ  | ON | 2007/01/19 10:00 |
| S71 | 6297   | hisashi.in.  | USPAT                        | ADJ  | ON | 2007/01/19 10:01 |
| S72 | 58     | S71 and tsukamoto.in.  | USPAT                        | ADJ  | ON | 2007/01/19 10:08 |
| S73 | 1      | "6951576".pn.  | USPAT                        | ADJ  | ON | 2007/01/19 10:08 |
| S74 | 8      | ("2928888"   "3298871"   "4709472"<br>  "5017442"   "5439760"  <br>"5549717").PN.                          | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 10:08 |
| S75 | 0      | ("6951576").URPN.  | USPAT                        | ADJ  | ON | 2007/01/19 10:10 |
| S76 | 8      | ("2928888"   "3298871"   "4709472"<br>  "5017442"   "5439760"  <br>"5549717").PN. OR ("6951576").<br>URPN. | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 10:26 |
| S78 | 3471   | 29/623.1-623.5.ccis.   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 13:11 |
| S79 | 1015   | S78 and (fold\$3 or bend\$3 or bent)   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 10:35 |
| S80 | 3518   | (fold\$3 or bend\$3 or bent) near<br>(electrode or cathode or anode or<br>collector)                       | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 10:36 |
| S81 | 145    | S78 and S80  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 12:58 |
| S82 | 2213   | adhesive tape same (electrode or<br>cathode or anode)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 13:01 |
| S83 | 0      | adhesive tapenear (electrode or<br>cathode or anode)   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 13:01 |
| S84 | 0      | adhesive tap enear (electrode or<br>cathode or anode)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 13:01 |
| S85 | 62     | adhesive tape near (electrode or<br>cathode or anode)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 13:01 |
| S86 | 473905 | S78 and adhesive or tape   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ  | ON | 2007/01/19 13:12 |
| S87 | 1082   | S78 and (adhesive or tape)   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ. | ON | 2007/01/19 13:13 |

## EAST Search History

|      |         |  |                        |     |    |                  |
|------|---------|--|------------------------|-----|----|------------------|
| S88  | 3379743 | (mandrel or mandril or spindle or pin or needle or rod or shaft or arbor or hollow or bobin) | US-PGPUB; USPAT; USOCR | ADJ | ON | 2007/01/19 13:15 |
| S89  | 995888  | adhesive or tape   | US-PGPUB; USPAT; USOCR | ADJ | ON | 2007/01/19 13:16 |
| S90  | 181247  | S88 same S89   | US-PGPUB; USPAT; USOCR | ADJ | ON | 2007/01/19 13:17 |
| S91  | 133     | S90 and S78  | US-PGPUB; USPAT; USOCR | ADJ | ON | 2007/01/19 13:17 |
| S92  | 219171  | ((positive electrode) or cathode)  | EPO; JPO; DERWENT      | ADJ | ON | 2007/01/22 10:23 |
| S93  | 208030  | (negative electrode) or anode  | EPO; JPO; DERWENT      | ADJ | ON | 2007/01/22 10:23 |
| S94  | 165281  | separator  | EPO; JPO; DERWENT      | ADJ | ON | 2007/01/22 10:23 |
| S95  | 44888   | (insulat\$4 or adhesive or protective) adj3 tape   | EPO; JPO; DERWENT      | ADJ | ON | 2007/01/22 10:25 |
| S96  | 16      | S95 near (S92 or S93)  | EPO; JPO; DERWENT      | ADJ | ON | 2007/01/22 10:27 |
| S97  | 422     | S95 same (S92 or S93)  | EPO; JPO; DERWENT      | ADJ | ON | 2007/01/22 10:28 |
| S98  | 125     | S97 and S94  | EPO; JPO; DERWENT      | ADJ | ON | 2007/01/22 10:29 |
| S99  | 11431   | S92  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:31 |
| S100 | 10412   | S93  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:30 |
| S101 | 10873   | S94  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:30 |
| S102 | 83174   | (positive electrode) or cathode  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:32 |
| S103 | 61785   | (negative electrode) or anode  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:32 |
| S104 | 46101   | separator  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:32 |
| S105 | 20086   | (insulat\$4 or adhesive or protective) near tape   | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:33 |
| S106 | 401     | S105 same (S102 or S103)   | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:40 |
| S107 | 263     | S106 and S104  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:34 |
| S108 | 1725    | S105 and (S102 or S103)  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 10:41 |
| S109 | 959     | S108 and lead  | US-PGPUB; EPO          | ADJ | ON | 2007/01/22 11:12 |

## EAST Search History

|          |        |   |                                      |     |    |                  |
|----------|--------|---|--------------------------------------|-----|----|------------------|
| S11<br>0 | 280333 | electrode or cathode or anode                             | US-PGPUB;<br>EPO                     | ADJ | ON | 2007/01/22 11:14 |
| S11<br>1 | 87566  | S110 and lead   | US-PGPUB;<br>EPO                     | ADJ | ON | 2007/01/22 11:14 |
| S11<br>2 | 2229   | S111 and S105   | US-PGPUB;<br>EPO                     | ADJ | ON | 2007/01/22 11:15 |
| S11<br>3 | 317    | S112 and collector  | US-PGPUB;<br>EPO                     | ADJ | ON | 2007/01/22 11:17 |
| S11<br>4 | 951067 | electrode or cathode or anode or<br>(collector adj plate) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:19 |
| S11<br>5 | 7048   | insulat\$4 near tape                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:20 |
| S11<br>6 | 64445  | adhesive near tape  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:20 |
| S11<br>7 | 2049   | protective near tape                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:20 |
| S11<br>8 | 11480  | (S115 or S116 or S117) and S114                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:26 |
| S11<br>9 | 6257   | S118 and lead   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:23 |
| S12<br>0 | 751    | S119 and separator  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:23 |
| S12<br>1 | 3347   | (S115 or S116 or S117) same S114                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:27 |
| S12<br>2 | 2024   | S121 and lead   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 11:29 |
| S12<br>3 | 353    | S122 and "429".clas.                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 14:07 |
| S12<br>4 | 47450  | burr  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 14:07 |

## EAST Search History

|          |        |  |                                      |     |    |                  |
|----------|--------|--|--------------------------------------|-----|----|------------------|
| S12<br>5 | 418    | S124 and "429".clas.                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 14:08 |
| S12<br>6 | 179    | S125 and (fold\$4 or bend\$3 or bent)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 14:54 |
| S12<br>7 | 1      | "6951576".pn.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/22 14:55 |
| S12<br>8 | 952482 | electrode or cathode or anode or (collector adj plate) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/02/05 13:09 |
| S12<br>9 | 7061   | insulat\$4 near tape                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/29 16:35 |
| S13<br>0 | 64546  | adhesive near tape                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/29 16:35 |
| S13<br>1 | 2051   | protective near tape                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/29 16:35 |
| S13<br>2 | 11501  | (S129 or S130 or S131) and S128                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/29 16:37 |
| S13<br>3 | 166    | S129 same begin  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/29 16:48 |
| S13<br>4 | 139    | S129 same start  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO | ADJ | ON | 2007/01/29 16:38 |
| S13<br>5 | 1      | "20020061448"  | US-PGPUB;<br>USPAT                   | ADJ | ON | 2007/01/30 15:15 |
| S13<br>6 | 1      | "6951576"  | US-PGPUB;<br>USPAT                   | ADJ | ON | 2007/01/30 16:14 |
| S13<br>7 | 15     | "5508122"  | US-PGPUB;<br>USPAT                   | ADJ | ON | 2007/01/30 15:21 |
| S13<br>8 | 22483  | tape same lead   | US-PGPUB;<br>USPAT                   | ADJ | ON | 2007/01/30 16:15 |
| S13<br>9 | 5526   | S138 and electrode                                     | US-PGPUB;<br>USPAT                   | ADJ | ON | 2007/01/30 16:15 |
| S14<br>0 | 143091 | tape and (tab or lead)                                 | US-PGPUB;<br>USPAT                   | ADJ | ON | 2007/01/30 16:15 |

## EAST Search History

|          |        |   |                    |     |    |                  |
|----------|--------|---|--------------------|-----|----|------------------|
| S14<br>1 | 26783  | S140 and electrode                          | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/30 16:16 |
| S14<br>2 | 5393   | S141 and begin                              | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/30 16:16 |
| S14<br>3 | 389    | S141 and ((begin or start) with<br>wind\$3) | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/30 16:18 |
| S14<br>4 | 65     | S143 and ("429" or "29").clas.              | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/30 16:18 |
| S14<br>5 | 1      | "20020061448"                               | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/31 10:40 |
| S14<br>6 | 12319  | tape same electrode                         | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/31 10:42 |
| S14<br>7 | 3513   | S146 same (tab or lead)                     | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/31 10:44 |
| S14<br>8 | 553    | S147 and ("429" or "29").clas.              | US-PGPUB;<br>USPAT | ADJ | ON | 2007/01/31 10:45 |
| S14<br>9 | 161    | morigaki.in.                                | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 12:59 |
| S15<br>0 | 15     | S149 and "429".clas.                        | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 13:04 |
| S15<br>1 | 2      | "6325611"                                   | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 13:04 |
| S15<br>2 | 11869  | secondary battery                           | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 13:10 |
| S15<br>3 | 707817 | electrode or cathode or anode               | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 13:11 |
| S15<br>4 | 8630   | S152 and S153                               | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 13:11 |
| S15<br>5 | 1163   | S154 and tape                               | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 15:37 |
| S15<br>6 | 161    | Morigaki.in.                                | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 15:36 |
| S15<br>7 | 1      | S155 and therm                              | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 15:37 |
| S15<br>8 | 1      | S155 and therm                              | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 15:38 |
| S15<br>9 | 991    | S155 and temp                               | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 15:38 |
| S16<br>0 | 991    | S155 and temperature                        | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 15:39 |
| S16<br>1 | 147    | S160 and shut                               | US-PGPUB;<br>USPAT | ADJ | ON | 2007/02/05 15:39 |